DOCUMENT RESUME

ED 075 579 VT 019 724

AUTHOR	Terry, Jared Y.
TITLE	The Aims and Needs of College Vocational Education Dropouts. A Research Report.
INSTITUTION	Louisiana Technological Univ., Ruston. Dept. of Agricultural Education.
SPONS AGENCY	Louisiana Research Coordinating Unit, Baton Rouge.
PUB DATE	Nov 72
NOTE	114p.
EDRS PRICE	MF-$0.65 HC-$6.58
DESCRIPTORS	College Students; *Dropout Characteristics; *Dropouts; Educational Research; Educational Status Comparison; Employment; *Followup Studies; *Persistence; *Vocational Education
IDENTIFIERS	Louisiana Technological University

ABSTRACT

This study was designed to determine the present status of former Louisiana Technological University students who failed to complete the requirements for graduation in vocational agriculture, business, and home economics education curriculums. To determine why these students left school and to secure their opinions as to what actions could have prevented their failure, data were collected through personal or telephone interviews with 179 dropouts and a random sample of 79 graduates and through examination of the subjects' high school and college transcripts. Of the 179 considered dropouts at the beginning of the study, 57 were reclassified as "persisters," in that they continued their education at another institution or in another curriculum at Louisiana Technological University. Reasons given by the 122 who resigned and did not continue in school elsewhere included marriage, pregnancy, financial and military obligations, lack of motivation, and disinterest. The dropouts reported low salaries, limited opportunities for advancement, instability of employment, and general dissatisfaction with their work. The comparison of high school and college records revealed greater differences between graduates and dropouts than between graduates and persisters. (SB)

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The Aims and Needs of College Vocational Education DROP-OUTS

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THE AIMS AND NEEDS OF COLLEGE VOCATIONAL EDUCATION DROPOUTS

A Research Report

by

Jared Y. Terry

This study was funded by the Research Coordinating Unit of The Louisiana State Department of Education.

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Issued by

The Department of Agricultural Education
College of Life Sciences
Louisiana Tech University
Ruston, Louisiana 71270

November, 1972

ACKNOWLEDGMENTS

The research staff wish to express their appreciation to the many persons who assisted in the completion of this project.

Louis J. Michot, State Superintendent, Department of Education, State of Louisiana

John E. O'Dowd, Jr., Assistant Superintendent, Career Education

F. Jay Taylor, President, Louisiana Tech University

Virgil Orr, Vice President, Academic Affairs
G. W. Byrnside, Vice President, Administrative Affairs
S. X. Lewis, Vice President, Student Affairs

Hal B. Barker, Dean, College of Life Sciences
Agnes C. Miller, Dean, College of Home Economics
B. Jack Collinsworth, Dean, College of Education

John L. Murad, Director, Division of Research, College of Life Sciences
M. Glynn Aycock, Director, Counseling Center
Eleanor S. Rockett, Registrar

To the personnel of the above administrative offices, our sincere thanks for their contribution and cooperation in securing material for our study.

The final editing and typing of the project by Mrs. Irene Walker is deeply appreciated.

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A STUDY OF THE AIMS AND NEEDS OF COLLEGE VOCATIONAL EDUCATION DROPOUTS

SECTION I

INTRODUCTION

The Problem

Any graduate of an approved high school in Louisiana may legally enter any institution of higher education under the jurisdiction of the State Board of Education, regardless of academic ability or occupational objective. The formal vocational guidance and counseling experiences of these students vary as widely as their backgrounds and academic achievements. During the registration process vocational students are often placed into a uniform curriculum traditional for all those working toward a degree in their particular academic areas, with little or no vocational counseling during or following their immediate entrance into a senior college.

Information acquired during freshman orientation classes reveals that many students have vague and unrealistic ideas as to why they are attending college or their objective in selecting a particular curriculum. In response to an American Council on Education survey of 1,112 freshmen students during the fall semester of 1971, 34.1 percent of the males and 38 percent of the females checked as a reason for going to college, "because my parents wanted me to go." It

would be difficult to evaluate the motives prompting this form of parental admonition. As a result of this and other factors, the attrition rate among the students at Louisiana Tech University has been estimated as high as 40 percent throughout the undergraduate ranks.

This heavy attrition rate represents loss of valuable time, sincere effort and money for the student, his parents, and taxpayers of Louisiana. It overburdens university facilities and diverts the teaching faculty's time and energies away from those students more likely to succeed in a university program. Unsuccessful students add to the number of underemployed and deprive the economy of trained manpower needed to fill existing vacancies in many desirable job classifications.

Related Research and Background Information

Recent studies conducted at Louisiana Tech University with a relatively small segment of the total student enrollment, revealed that there was no significant correlation (.43) between achievement test scores and success in an academic program. The ACT scores from 120 of 194 students who resigned during the spring quarter of 1971 showed that 34 percent scored 20 to 24 on the tests and 13 percent scored 25 to 36. This indicated that many of those dropouts were capable students with the intellectual capacity to succeed. With proper guidance and motivation during

secondary school and their college careers, these students could have been prepared for skilled, highly productive careers in higher paying jobs.

Objectives

This research was designed to locate, interview and determine the present status of former Louisiana Tech University students who failed to complete the requirements for graduation in Vocational Agriculture, Business, and Home Economics Education curricula. It sought to determine why those students found it necessary or desirable to leave school and to secure their opinions as to what actions could have prevented their failure.

The specific objectives of this research were:

(1) To locate former Louisiana Tech University students who failed to complete their college program in vocational education.

(2) To determine their present occupational status and level of educational achievement.

(3) To interview those dropouts in order to secure their opinions as to what actions the university might have taken to prevent their failure.

(4) To accumulate and evaluate personal background information that might influence success or failure in college.

(5) To evaluate the importance of vocational guidance functions in career orientation.

(6) To secure the subjects' opinions on several aspects of vocational and career education of less than college grade.

(7) To develop criteria by which potential dropouts might be identified by a "dropout profile" as determined from the data collected.

Procedures

The data in this research were collected through personal interviews with each subject by professional or trained surveyors. The interview was made in the subject's home, place of business or some convenient place designated by the interviewee. An attempt was made to insure that each subject was interviewed by someone known to him, in order to obtain a more candid response. Former teachers of the respondent, guidance counselors and other professional people were used whenever possible. In cases where subjects were located in distant states, long distance telephone calls were made, or if the subjects were overseas, parents were asked to secure the information. In a few instances questionnaires were mailed to the respondent.

Personal data were secured from the subjects' high school records and college transcripts from the university records section (Appendix 1). Other pertinent data were

obtained and recorded on a comprehensive questionnaire designed for this study (Appendix 2).

Population and Sample

The subjects of this research were full-time students who interrupted their program in Vocational Agriculture, Home Economics, and Business Education at Louisiana Tech University during the academic years 1966-67, 1967-68, 1968-69, 1969-70 and 1970-71. The five most recent years were selected because it was felt that this would give a more reliable indication of prevailing conditions that might influence college success or failure.

One hundred eighty, the total number of dropouts from the three curricula involved, were included in the study.

As a basis for comparison 79 persons who graduated successfully during the same five-year period were randomly selected to participate in the study. It was decided at the outset of the plan for research that a high percentage of the subjects must be contacted in order to establish an acceptable level of confidence for the data collected. One hundred percent of those meeting the guidelines described above were contacted. Of those failing to meet the requirements for graduation in teacher education at Louisiana Tech, 41 represented Agriculture, 35 Home Economics, and 104 Business Education. Of the seventy-nine who were successful

and chosen for comparison, 15 represented Agriculture, 36 were in Home Economics, and 28 were from Business Education.

It was discovered that the subjects were a highly mobile group, widely dispersed, with numerous changes of address and often difficult to locate. It was necessary to contact many of the subjects while at home briefly on military leave or an infrequent family visit.

Analysis of Data

Data collected in this study were of two distinct types, necessitating two special forms of treatment. Since many of the reactions to the interview were in the form of opinions, responses were grouped according to frequency of occurrence and reported in tabular form as percentages. Clusters of responses may seem redundant in some tables and would appear to lend themselves to more meaningful reporting by condensing them into fewer categories. However, in order to establish a high level of confidence, it was felt that personal interpretations by the research staff should be held to a minimum to eliminate bias and maximize reliability of the data.

Personal and background data believed to have positive influence on student success or failure were subjected to a more sophisticated treatment.

The basic procedure that dominates this interpretation is that of comparison. The groups compared were: (1) the group that continued in the vocational programs until

graduation and (2) the group that dropped out of the vocational programs. The latter group consists of two subgroups: those who transferred to another degree program (the persisters) and those who did not. In the interpretation process, the persisters were given considerable attention as a group of major interest. However, this group was not compared to the dropout group, since one group is a subgroup of the other. Hence the basic pattern was to compare the graduates with (a) the total dropout group and (b) the sub-group of dropouts called the persisters.

Most statistical procedures center around one of two approaches, a study of differences and a study of relationships. The chief concern in this study lies in the area of differences. If several groups are to be compared, the usual procedure is the chi-square or analysis of variance. However, if only two groups are to be compared, the simple "t" test is the one that is commonly used. In this interpretation, the "t" test and chi-square were the principal techniques used. In the area of relationships, there were some situations in this analysis that were suited to some specialized procedures. The one that was of primary value was the coefficient of contingency. This is a relatively crude measure, frequently associated with the chi-square procedure. In several situations, both chi-square and coefficient of contingency (C) are shown.

Since the terms "Graduates", "Dropouts" and "Persisters" will be used continuously in this report, the groups will be identified with the initials G, D and P, respectively.

SECTION II

PRESENTATION OF DATA

Decision to Attend College

The decision to attend or not to attend college should be a subject for strong consideration by parents, students, guidance personnel, school administrators and others who advise and counsel prospective college students. A college education is expensive, time consuming, and in some instances a frustrating experience.

Beginning in early childhood and extending through the elementary and secondary school years, this decision becomes the subject of extensive family discussion. Although Department of Labor statistics indicate that most growth in employment opportunities was in the area of professional and technical careers during the past decade, with a similar pattern for the seventies, many opportunities for satisfactory employment exist in areas demanding less formal preparation. However, it would appear from data collected in this study that these considerations are not completely dominant in the decision making process, as shown in Tables I and II.

Without separating the persisters from the dropouts in Table I, it is evident that approximately one-third of the dropouts had reached the decision to attend college before

high school, while some fifty-five percent of the graduates had made their decision prior to high school.

TABLE I

Decision to Attend College

Stage of Life Decision Was Made	Dropouts		Persisters	
	Number	Percent	Number	Percent
Childhood	40	22.22	31	39.24
Elementary	10	5.56	9	11.39
Junior High	11	6.11	3	3.80
High School	99	55.00	34	43.04
After High School	20	11.11	2	2.53

Considering the persisters separately (Table I-A), it is apparent that this group is more closely aligned with the graduates up to the "after high school" category, where they become more closely associated with the dropouts.

TABLE I-A

Decision to Attend College

Stage of Life Decision Was Made	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Childhood	17	13.82	23	40.35	31	39.24
Elementary	6	4.88	4	7.02	9	11.39
Junior High	8	6.50	3	5.26	3	3.80
High School	79	64.23	20	35.09	34	43.04
After High School	13	10.57	7	12.28	2	2.53

It would seem that the evidence here is inconclusive and that it would be pure speculation to say that an early decision to attend college contributed to an individual's chances for successful completion of a college curriculum. However, an examination of Table II might provide some insight into this statistic.

TABLE II

Decision to Attend College Prompted by

Decision Prompted by:	Dropouts		Graduates	
	Number	Percent	Number	Percent
Parents	67	37.22	54	68.35
Teacher	9	5.00	5	6.33
Peers	9	5.00	2	2.53
Relatives	8	4.45	0	0.00
Scholarship	2	1.11	0	0.00
Desire to Advance	34	18.89	15	18.99
Self Improvement	51	28.33	3	3.80

Sixty-eight percent of the graduates reported that their parents played major roles in their decision to attend college, compared to thirty-seven percent of the dropouts. There was no significant difference in considering the persisters separately, except in the category of "the desire

to advance", which one would expect to be a source of motivation for this group (Table II-A).

TABLE II-A

Decision to Attend College Prompted by

Decision Prompted by:	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Parents	39	31.71	28	49.12	54	68.35
Teacher	6	4.88	3	5.27	5	6.33
Peers	8	6.50	1	1.75	2	2.53
Relatives	8	6.50	0	0.00	0	0.00
Scholarship	2	1.63	0	0.00	0	0.00
Desire to Advance	15	12.19	19	33.33	15	18.99
Self Improvement	45	36.59	6	10.53	3	3.80

A safe inference here would be that members of a college oriented family have a higher probability for success than those who lack such a background. Typical remarks such as: "It was always expected that I would attend college", or "I accepted the idea in early childhood that my parents planned for me to get a college education" recurred throughout the questionnaire.

Of some importance to all groups were the categories of "desire to advance" and "self improvement". There

appears to be little evidence of significant influence from formal guidance and counseling services.

Decision to Attend Louisiana Tech

Closely associated with this phase of the study, was the investigation into why students elected to attend one university in preference to another similar institution (Table III).

TABLE III

Decision to Attend Louisiana Tech University

Contributing Factors	Dropouts		Graduates	
	Number	Percent	Number	Percent
Scholarship	2	1.11	0	0.00
Strong Curriculum in Chosen Field	45	25.00	24	30.38
Location	64	35.56	25	31.65
Size	7	3.89	7	8.86
Peers Attending	26	14.44	6	7.59
Spouse Attending	3	1.67	2	2.53
Relatives Attending or Were Alumni	27	15.00	15	18.99
Quarter System	4	2.22	0	0.00
No Answer	2	1.11	0	0.00

As one would expect, the location of the institution played a major role in the decision to enroll at Louisiana Tech University. Since other institutions of higher education are strategically located throughout the state offering similar curricula, one would expect a large percentage of students to matriculate near their homes.

Also of major importance in the decision making process was a strong curriculum in the student's area of interest. This item was of considerable importance to both dropouts and graduates and showed no significant difference when the persisters were considered separately, although they were more closely aligned with the graduates. (See Table III-A).

Tradition exerted its expected influence in choice of schools, in that approximately 29 percent of the dropouts indicated that they were influenced in their selection of colleges by friends and relatives, as compared to 26 percent of the graduates. It is interesting to note here that approximately twice the percentage of dropouts selected their college because their friends were enrolled there as did the graduates and persisters.

It would appear that the recommendations of relatives and alumni are more reliable guides to decision making than the fact that one's friends are in attendance at a particular institution.

TABLE III-A

Decision to Attend Louisiana Tech University

Contributing Factors	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Scholarship Award	2	1.63	0	0.00	0	0.00
Strong Curriculum in Chosen Field	30	24.38	15	26.32	24	30.38
Location	47	38.21	17	29.82	25	31.65
Size	5	4.06	2	3.51	7	8.86
Peers Attending	21	17.07	5	8.77	6	7.59
Spouse Attending	2	1.63	2	3.51	0	0.00
Relatives Attending or Were Alumni	12	9.76	15	26.32	15	18.99
Quarter System	2	1.63	2	3.51	0	0.00
No Answer	2	1.63	0	0.00	0	0.00

High School Averages

Extensive research has shown that one of the best predictors regarding college achievement is still the high school average, despite the development of elaborate testing programs designed to serve as bases for such predictions.

Hence, in this study, it is important that the groups be investigated from the standpoint of high school averages. All grades are based on a 4-point scale; that is, A=4, B=3, C=2, D=1, F=0.

In a sense, these data represent means of means, since the data on each graduate was his high school average. To study the group, means of such averages were computed. Group sizes were: G, 79; D, 180.

For group G, mean = 3.17, with a standard deviation of .59

For group D, mean = 2.83, with a standard deviation of .66

Difference 34

The standard error of the difference was .082, so that the critical ratio (Difference/standard error of the difference) was 4.15.

This critical ratio is great enough to justify rejection of the null hypothesis at the .01 level, that is, a difference of this size would occur by chance only one time in a hundred. In more practical terms, this critical ratio indicates that the mean high school average for group G was significantly higher than that for group D.

If we isolate from group D the 57 persisters (group P), we find that the latter group (P) showed a slightly different pattern.

For group G, mean = 3.17, standard deviation of .59
For group P, mean = 2.90, standard deviation of .59

If we repeat the procedure, we find that this difference of .27 converts into a critical ratio of 2.7. Again, this meets the test of significance at the .01 level, the difference favoring group G.

TABLE IV

High School Averages

Grade	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
A	17	9	5	9	10	13
A-	15	8	7	12	15	19
B+	15	8	3	5	5	6
B	30	17	10	17	22	28
B-	22	12	14	24	14	18
C+	24	13	4	7	3	4
C	38	21	15	26	7	9
C- and D	19	11	0	0	3	4

As another approach to comparing high school averages, the graduates and persisters were combined. (Actual number is shown in parentheses after the percentage.)

A's - 35% (20) dropouts, as compared to 65% (37) graduates and persisters, were A or A- students.

B's - 37% (40) dropouts, as compared to 63% (68) graduates and persisters, were B+, B, or B- students.

C's - 60% (43) dropouts, as compared to 40% (29) graduates and persisters, were C+ or C students.

D's - 86% (19) dropouts, as compared to 14% (3) graduates and persisters, were C- or D students.

Composite Scores on ACT

Two types of test scores were noted in the study of the two basic groups--ACT and SCAT. For ACT, only composite scores were available for analysis. The results are as follows:

Group G, mean = 17.26, standard deviation = 4

Group D, mean = 18.1, standard deviation = 9.9

Group P, mean = 21.02, standard deviation = 12.0

It is interesting to note that, although group G had the lowest mean score, it is a much more "homogeneous" group, in that its standard deviation is considerably less than that for the other groups.

On the basis of a "t" test, neither the .84 difference between G and D nor the 3.74 difference between G and P met the test for significance at the .05 level.

SCAT Scores

SCAT scores were available for the two basic groups, G and D. However, only about 5 of group P had such scores, so that statistical analysis of their results was not feasible.

Graph 1

Comparison of ACT National Percentile Scores

English | Mathematics | Social Studies | Natural Science | Composite

———— National Percentiles - 1,290,812 college bound high school students[1]

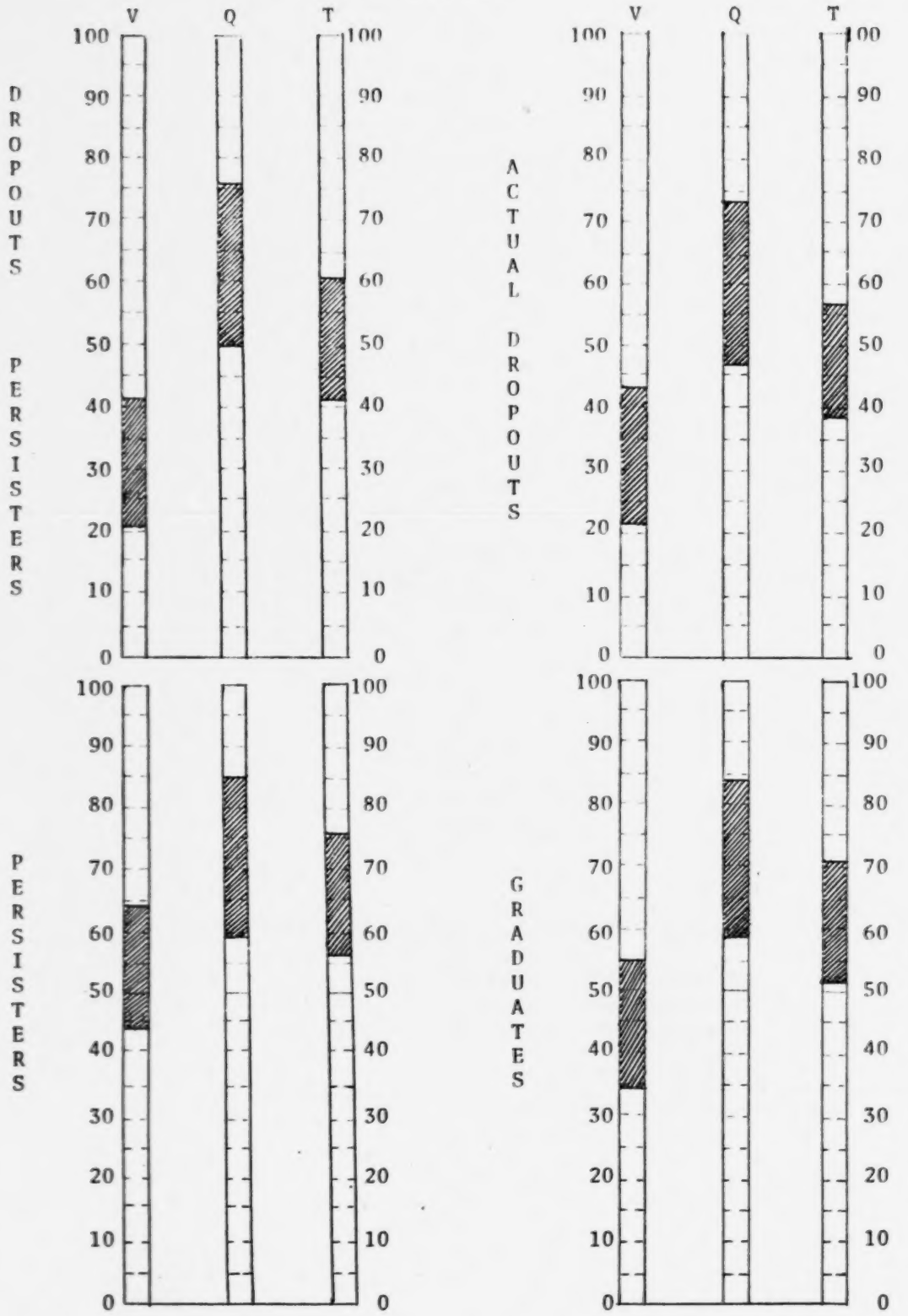
— — — — Louisiana Tech - Group P

———— Louisiana Tech - Group D

. . . . . Louisiana Tech - Group D and P combined

[1]American College Testing Program

SCAT National Percentile Band
Of Subjects



For groups G and D, the SCAT scores were available on Verbal, Quantitative and Composite. The results were as follows:

Verbal

Group G, mean = 31.86, standard deviation = 8.9

Group D, mean = 29.16, standard deviation = 3.4

(On the basis of a "t" test, this is not a significant difference).

Quantitative

Group G, mean = 36.20, standard deviation = 7.43

Group D, mean = 33.9, standard deviation = 8.02

(This difference falls just short of meeting the test for significance at the .05 level).

Total

Group G, mean = 68.08, standard deviation = 14.17

Group D, mean = 63.08, standard deviation = 15.02

(The difference of 5.00 between the means does not meet the test for significance at the .05 level).

Pursued College Averages

There are some variables in this comparison that did not occur when we compared groups on the basis of high school averages. While all of group G had compiled college averages on the basis of a substantial number of college courses, this was not necessarily true of group D. It is apparent from common observation, as well as the data

generated in this study, that some of the members of group D had college careers that were somewhat abbreviated. However, some comparisons are justified in this case.

For group G, mean = 2.643, standard deviation = .56
For group D, mean = 2.10 , standard deviation - .90

On the basis of the standard error of the difference for the two groups, this difference (.543) converts into a critical ratio of 5.90. This meets the test for significance at .01 level, with the balance obviously favoring the group G.

If we extract group P--in this case, 56 students--from the parent group (group D), we arrive at a somewhat different result.

For group G, mean = 2.643, standard deviation = .56
For group P, mean = 2.55, standard deviation = .63

This difference of .093 fails to meet the test of significance at the .05 level, as it converts to a critical ratio of .89. This would indicate that there is a greater degree of homogeneity between groups G and P than between groups G and D. One would logically expect this, in view of the makeup of the groups involved.

For the "t" test comparison, pursued averages were used, for a better measure of success.

TABLE V

Earned College Average

Grade	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
A	2	1	1	2	4	5
B	26	15	14	24	22	28
C	72	40	32	55	53	67
D	76	42	11	19	0	0
W	4	2	0	0	0	0

To assist in comparing college averages, graduates and persisters were combined. (Actual number is shown in parentheses after the percentage.)

A's - 17% (1) dropouts, as compared to 83% (5) graduates and persisters, were A students.

B's - 25% (12) dropouts, as compared to 75% (36) graduates and persisters, were B students.

C's - 32% (40) dropouts, as compared to 68% (85) graduates and persisters, were C students.

D's - 86% (65) dropouts, as compared to 14% (11) graduates and persisters, were D students.

Rural-Urban Background

The purpose of this phase of the study was to ascertain if there were any identifiable patterns as to distribution of persons among the groups on the basis of a rural-urban breakdown.

The distributions among groups are shown in Table VI.

TABLE VI

Rural-Urban Background

Size of Town	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Under 1,000	54	30	13	23	15	19
1,001 - 5,000	37	21	14	25	25	32
5,001 - 10,000	30	17	3	5	8	10
10,001 - 25,000	14	8	4	7	14	18
25,001 - 50,000	9	5	7	12	4	5
50,001 - 100,000	9	5	6	11	2	3
Over 100,000	27	15	10	18	11	14

In investigating differences among patterns where we are dealing with categorical data, i.e., data which do not

represent points along a continuum, a useful technique is that of chi-square.

A chi-square test based upon a contingency table involving groups G and D was made. This yielded a chi-square value of 12.20. With 6 degrees of freedom, which was the case here, a chi-square value of 12.59 is required in order to meet the test of significance at the .05 level. Hence, our value falls just short of meeting this test, so that we cannot be sure that there is a true difference in residence patterns between groups G and D.

Incidentally, a "relationship" measure between residence classification and graduation-dropout status yields a coefficient of contingency of .21, which is too low to allow any sort of generalization relative to these groups.

Size of High School

While it is not part of this study to delve into the merits or demerits of high schools, either large or small, it is logical to make some internal comparisons of the basic groups in terms of the high school from which they graduated.

Again a chi-square procedure was used in comparing groups. When groups G and D were analyzed, the data yielded a chi-square value of 14.64. With 4 degrees of freedom, this chi-square value met the test of significance at the

.01 level. This says, in effect, that one may safely conclude that these two groups, G and D, cannot be assumed to have the same background as to size of high school. While statisticians do not like to make such statements, this means that there was a difference between the two groups in this regard. Generally, members of group G come from larger high schools than group D.

TABLE VII

Size of High School

Size of School	Group D		Group P		Group G	
	Number	Percent	Number	Percent	Number	Percent
75 and Under	13	7	6	11	8	10
76 - 150	41	23	9	16	3	4
151 - 350	37	21	9	16	19	24
351 - 750	34	19	8	14	19	24
More than 750	55	31	25	44	30	38

While chi-square does not lend itself to internal interpretations, it may be noted from the previous table that there are some major differences between the two groups. A notable case is that of the 76-150 school. Only 4% of group G came from such schools, while 23% of group D came from them.

Incidentally, the corresponding coefficient of contingency for this array is .29, which, for these conditions, would be considered significant.

When the chi-square test was applied to an array based upon groups G and P, a chi-square value of 9.14 resulted. With our 4 degrees of freedom, this falls short of the test for significance at the .05 level. This implies some interesting contrasts between group P and its parent group, D, since one differs significantly from group G while the other does not. The coefficient of contingency here is .25.

Participation in Competitive Events

Though it may appear somewhat far afield to evaluate student activity in competitive events as a predictor of success in college, it is generally felt that participation in extra-curricular activities is an indication of maturity, generally associated with the better achievers.

Though not entirely conclusive, the data collected in this study indicated that group D included a higher percentage of subjects who did not take part in any competitive activities than did group G (Table VIII).

When group P was extracted from the parent group, there appeared to be a slight change in the degree of participation, favoring the persisters (Table VIII-A).

TABLE VIII

Participants in Competitive Events in High School

Number of Competitive Events Engaged in:	Dropouts		Graduates	
	Number	Percent	Number	Percent
None	60	33.34	21	26.58
One	39	21.67	10	12.66
Two	31	17.22	14	17.72
Three	26	14.44	6	7.69
Four or More	24	13.33	28	35.44

TABLE VIII-A

Participants in Competitive Events in High School

Number of Events	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
None	40	32.52	20	35.09	21	26.58
One	24	19.51	15	26.32	10	12.66
Two	20	16.26	11	19.29	14	17.72
Three	22	17.89	4	7.02	6	7.69
Four or More	17	13.82	7	12.28	28	35.44

Membership in School Organizations

Membership in high school organizations came under scrutiny as a predictor of college success with an

interesting statistic in the group that, at times, might be referred to as "joiners". In comparing groups D and G (Table IX), the dropouts dominate membership participation in school organizations until we reach the "very active" category, which includes those who were active in four or more clubs. At that point group G took a commanding lead.

TABLE IX

Active Members in High School Organizations

Number of High School Organizations Active in:	Dropouts		Graduates	
	Number	Percent	Number	Percent
None	18	10.00	5	6.41
One	15	8.33	4	5.13
Two	37	20.56	8	10.26
Three	40	22.22	12	15.38
Four or More	70	38.89	49	62.82

When group P was considered apart from group D (Table IX-A), the same general pattern was observed, except that the persisters did not exhibit the high level of increase shown by group G. Group P appeared more closely aligned with Group D than with group G.

TABLE IX-A

Active Members in High School Organizations

Number of High School Organizations	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
None	17	13.82	1	1.75	5	6.41
One	12	9.76	3	5.26	4	5.13
Two	27	21.95	10	17.54	8	10.26
Three	24	19.51	16	28.08	12	15.38
Four or More	43	34.96	27	47.37	49	62.82

Leadership Activities in High School Organizations

A student's willingness to accept positions of leadership in school organizations is generally accepted as an indication of his acceptance of commensurate responsibility. With this thought in mind, the subjects were asked to list the number of offices they had held in youth organizations during their high school careers. This aspect of the high school experience was subjected to a more thorough analysis. The following degrees of participation were noted:

81 percent of the dropouts held club offices.
84 percent of the persisters held club offices.
82 percent of the graduates held club offices.

A further analysis was based upon the number of club offices held during the high school years. Three categories were used. These were:

	D	P	G
Somewhat active 2 or fewer offices held	87	40	29
Quite active 3, 4 or 5 offices held	49	12	29
Very active more than 5 offices held	10	5	7

A chi-square procedure was used in this situation, with the following results:

> Group G versus group D, chi square of 4.60 with 2 degrees of freedom. This did not meet the test of significance at the .05 level.

Group G versus group P, chi-square of 8.7. This meets the test of significance at the .05 level. However, the pattern of dispersion makes it difficult to generalize on this point. The P group dominates in the "somewhat active" category, while the G group dominates in the "quite active" category.

Source of Financing High School Education

Since most high school students live at home and are supported by their parents, financing education does not present the problem a family encounters when one or more members enroll in an institution of higher education where costs become a matter of major consideration for many.

An examination of Table X does not reveal any significant difference between groups G and P, although the graduates were somewhat more active in money making projects at home.

TABLE X

Employment Status in High School

Categories	Dropouts		Graduates	
	Number	Percent	Number	Percent
Sometimes Worked Away from Home	29	16.11	10	12.66
School Cooperative Program	2	1.11	0	0.00
Money Making Project at Home	7	3.89	5	6.33
Regular Job Away from Home	6	3.33	2	2.53
No Specific Reply	1	.56	2	2.53
Total Employed	45	25.00	19	24.05
Did Not Work	135	75.00	60	75.95

When we separate group P from group D (Table X-A), the differences remain negligible.

Table X-A

Employment Status in High School

Categories	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Sometimes Worked Away from Home	23	18.69	6	10.53	10	12.66
School Cooperative Program	0	0.00	2	3.51	0	0.00
Money Making Project at Home	5	4.07	2	3.51	5	6.33
Regular Job Away from Home	4	3.25	2	3.51	2	2.53
No Specific Reply	1	.81	0	0.00	2	2.53
Total Employed	32	26.83	12	21.05	19	24.05
Did Not Work	90	73.17	45	78.95	60	75.95

Employment Status in College

Working one's way through college has for many years been viewed as an approved and popular means of financing the education of the young. However, during intervals of economic affluence, this method of finance has assumed less significance.

An analysis of data presented in Table XI indicates that most college students who worked, did so intermittently or worked part-time for money for "extras" such as hobbies and amusement.

TABLE XI

Employment Status in College

Categories	Dropouts		Graduates	
	Number	Percent	Number	Percent
Regular Work--Full Time College Support	16	8.89	0	0.00
Work Study Program	18	10.00	9	11.39
Part-Time Work Supplemented College Support	32	17.78	15	18.99
Intermittent Work for Extras	26	14.44	30	37.97
Did Not Work	88	48.89	25	31.65

There were no significant changes when group P was extracted from the parent group and considered separately.

The work-study programs for needy students showed approximately the same degree of participation for groups D and P.

Sources of Financing College Education

Another classification scheme used was based upon source of financial aid for education at the college level. The results are reflected in Table XII.

Table XII

Source of Financing Education

Source	Group D		Group P		Group G	
	Number	Percent	Number	Percent	Number	Percent
Parents	45	36	31	55	35	44
Parents and Self	28	23	4	7	15	19
Self	13	10	3	5	0	0
Vocational Rehabilitation	12	10	1	2	2	3
GI Bill	1	1	3	5	1	1
Scholarship	9	7	4	7	7	9
Grants and Commercial Loans	7	6	1	2	10	13
NDEA Loan and Work	9	7	9	16	9	11

When we analyze group G versus group D in a chi-square procedure, we arrive at a chi-square value of 15.64, with 7 degrees of freedom. This meets the test of significance at the .05 level but not at the more rigorous level of .01.

When we extract group P from its parent group and compare it with group G, we arrive at a chi-square value of 17.21. This also meets the test for significance at the .05 level. Indeed, this is an unusual case in that the computed value is greater when we compare groups G and P than when we compare groups G and D. However, the difference is too slight to justify any broad conclusions.

Two items draw attention to themselves in this category. One is that no one in group G was responsible for his complete support while in college and the three cases in group P reported that they had independent incomes from investments and did not work. Also, it appeared that group G displayed more confidence in their ability to complete their education, in that they participated more freely in using commercial loans which would be repaid from future earnings.

Occupation of Fathers

Any occupational classification scheme is somewhat arbitrary in nature. However, it was felt that information about such occupations would be helpful in comparing our basic groups.

TABLE XIII

Occupational Classification of Fathers

Classification	Group D		Group P		Group G	
	Number	Percent	Number	Percent	Number	Percent
Top Management, Major Professional	0	0	3	5	8	10
Executive, Administrative, Lesser Professional	5	4	15	26	13	16
Owner or Manager	25	21	8	15	4	5
Technician, Minor Administrative, Low Supervisory	30	25	9	17	14	18
Clerical, Non-Supervisory	8	7	1	2	5	6
Craftsmen	13	11	11	21	14	18
Service and Protective Workers	5	4	2	4	2	3
Salesmen	16	13	1	2	2	3
Farmers (Owners and Managers)	1	1	2	4	12	15
Military	10	8	2	4	1	1
Laborers	7	6	0	0	4	5

Table XIII represents classifications and the distribution of each group relative to these classifications.

A chi-square procedure was used with groups G and D as basic patterns. This yielded a chi-square of 38.23. With 10 degrees of freedom, this value is in excess of that required to meet the test of significance at the .01 level. It should be repeated that the chi-square procedure does not pinpoint the location of the specific differences; rather it tests the entire array of differences. The corresponding coefficient of contingency is .36. Generally, group G fathers held "higher" classified occupations than did group D fathers.

A corresponding analysis of groups G and P yields a chi-square of 15.72. With 10 degrees of freedom, this value falls short of the test of significance at the .05 level. There seems to be a difference when we compare groups G and D, but when we compare groups G and P, no such conclusion can be reached.

Possibly of more importance than the occupational classification of his father to a student's potential success in school, is the family relationship within the home. It is apparent that children have more freedom of movement, spend less time at home, and have fewer opportunities for close family relationships than any previous

generation of Americans. They have fewer family responsibilities and in many instances have little or no knowledge of the details of the father's occupation or the world of work. They appear to lack the mental discipline necessary for the transition from high school to college with its attendant problems and responsibilities. This hypothesis receives some measure of support from the data contained in Table XIII. The occupations of technicians, craftsmen, and farmers are usually characterized by regular working hours, more time at home, and lend themselves more naturally to the involvement of children in the family business. These occupational areas favor groups G and P over D.

Occupation of Mother

It was felt that the occupational classification of the mother would have more bearing on the student's success or failure in college than the father's occupation. However, this was not supported by evidence (Table XIV).

Although there is no general pattern of significant differences between groups D and G, when we extract group P from its parent group for consideration, it appears more closely aligned with group G than group D.

TABLE XIV

Occupational Classification of Mother

Classification	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Top Management, or Major Professional	0	0.00	0	0.00	0	0.00
Executive, Administrative, Lesser Professional	13	10.57	11	19.29	11	13.92
Owner or Manager - Small Retail Business	2	1.63	1	1.75	3	3.79
Technicians, Minor Administrative	3	2.44	2	3.52	4	5.07
Clerical (Non-Supervisory)	13	10.57	7	12.29	11	13.92
Craftsmen	0	0.00	0	0.00	0	0.00
Service and Protective Workers	8	6.50	3	5.26	5	6.34
Salesmen	4	3.25	0	0.00	3	3.79
Farmers	1	.81	0	0.00	0	0.00
Military Personnel	0	0.00	0	0.00	0	0.00
Laborers	2	1.63	0	0.00	0	0.00
Did Not Work	77	62.60	33	57.89	42	53.17

Educational Achievement of Mother

Though inconclusive, this section of the study produced some interesting contrasts, as shown in Table XV. More than twelve percent of the mothers in group D reported "some college", while sixteen percent indicated they had earned a baccalaureate degree or higher. This might be construed as a 14 percent dropout rate among the mothers of dropouts, as compared to 7 percent of the group G mothers.

TABLE XV

Education of Mother

Education	Dropouts		Graduates	
	Number	Percent	Number	Percent
Some School (1-7)	7	3.89	4	5.06
Some High School (8-11)	22	12.22	8	10.13
High School Graduate	72	40.00	25	31.65
Special School	26	14.44	18	22.79
Some College	22	12.22	4	5.06
Junior College	3	1.68	2	2.53
Baccalaureate	22	12.22	14	17.72
Baccalaureate Plus	6	3.33	4	5.06

Almost 23 percent of the group G mothers reported special school attendance as compared to 14 plus percent of the group D mothers. This might indicate a recognition by

this group of the importance of some form of occupational training beyond high school.

It would be difficult to defend any broad conclusions based on these data.

Father's Educational Achievement

As with the mother's educational achievements, it is difficult to note any significant data correlating the father's educational level with his child's success in college (Table XVI). However, it is interesting to note that in the area of "special schools" group G did excel over group D.

TABLE XVI

Education of Father

Education	Dropouts		Graduates	
	Number	Percent	Number	Percent
Some School (1-7)	21	11.67	6	7.59
Some High School (8-11)	31	17.22	11	13.92
Graduated--High School	46	25.56	19	24.05
Special School	21	11.67	12	15.19
Some College	28	15.55	13	16.46
Graduated--College	26	14.44	10	12.66
Baccalaureate Plus	6	3.89	8	10.13

This was also evident in Table XV, Education of Mother. In this study special schools refer to vocational-technical schools and other public and private vocational schools of less than college grade.

When group P was considered apart from group D (Table XVI-A), they were more closely aligned with group G, with the higher educational levels of parents clearly favoring the students who completed their college programs.

TABLE XVI-A

Education of Father

Education	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Some School (1-7)	19	15.45	2	3.51	6	7.59
Some High School (8-11)	29	23.58	2	3.51	11	13.92
Graduated High School	31	25.20	15	26.32	19	24.05
Special School	10	8.13	11	19.29	12	15.19
Some College	16	13.01	12	21.05	13	16.46
Baccalaureate Degree	14	11.38	12	21.05	10	12.66
Baccalaureate Plus	3	3.25	3	5.27	8	10.13

Curricular Interruptions

Of the 180 persons considered dropouts at the beginning of the study, fifty-eight were reclassified as "persisters", in that they continued their education at another institution or in another curriculum at Louisiana Tech University. One was reported deceased while a full-time student.

Resignations

Forty of this number resigned from Louisiana Tech and continued their education as a full-time student at other institutions. A variety of reasons were given for the change, most of which had no bearing on the quality of offerings at Louisiana Tech.

Friends attending another university	7
Married and moved with spouse to a job	6
Moved with family to another community	6
Were not happy at Louisiana Tech	3
Illness	3
Larger school with broader curriculum	2
Out-of-state fees too high	2
Commuting too far each day	2
Job requirements too severe	1
Wanted to attend a smaller school	1
Wanted to attend school away from home	1
Change of interest	1
Suspension	1

Could not transfer enough credits	1
Tired of school	1
Program was canceled	1
Deceased	1

Change of Curriculum

Eighteen of the persisters merely changed their curricula and continued their education as full-time students at Louisiana Tech.

Almost one-half of this group indicated that they decided not to teach after their exposure to student teaching. Reasons given were as follows:

Decided they did not want to be a teacher	9
More job opportunities elsewhere	3
Desired a shorter program (2-year certificate)	2
Not happy in first choice	2
Unable to meet requirements of curriculum	2

These data indicate that a majority of the changes by persisters were made for convenience' sake rather than dissatisfaction with the curricular offerings or the university environment.

There is, however, a strong implication for more guidance and counseling services for those who changed their curriculum and continued in school at Louisiana Tech. All of the cases indicate a lack of information concerning the

requirements of the curriculum or the requirements of the profession for which they were preparing.

Marital problems and divorce within the family were not a factor in the success or failure of the subjects considered in this study (Tables XVII, XVII-A, XVIII and XVIII-A).

Only one student reported that it was necessary to resign to help support younger children following parents' divorce.

TABLE XVII

Parents Residing Together When Entered Tech

Responses	Dropouts		Graduates	
	Number	Percent	Number	Percent
Yes	162	90.00	70	88.61
No	8	4.44	4	5.06
Deceased	10	5.56	5	6.33

TABLE XVII-A

Parents Residing Together When Entered Tech

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	107	87.81	55	94.74	70	88.61
No	7	5.69	1	1.75	4	5.06
Deceased	7	6.50	2	3.51	5	6.33

TABLE XVIII

Parents Residing Together When Dropped Out

Responses	Dropouts		Graduates	
	Number	Percent	Number	Percent
Yes	161	89.44	69	87.34
No	9	5.00	5	6.33
Deceased	10	5.56	5	6.33

TABLE XVIII-A

Parents Residing Together When Dropped Out

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	106	86.99	55	94.74	69	87.34
No	8	6.50	1	1.75	5	6.33
Deceased	8	6.50	2	3.51	5	6.33

Sibling Status

Another aspect of the study was concerned with comparisons of sibling status among groups D, P and G. This took two directions: (1) the number of siblings in the family

and (2) the position or rank of subjects among their siblings.

Number of Siblings

Table XIX indicates the number of siblings by groups. Again, a chi-square procedure was used to test the hypothesis that there were no discernible patterns among the three groups (D, P and G). As a matter of practicality, those subjects with seven or more siblings were combined and treated as a single group.

TABLE XIX

Size of Family

Number of Siblings	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Only Child	13	45.00	10	34.00	6	21.00
Two	24	35.00	17	25.00	26	39.00
Three	29	42.00	12	18.00	27	40.00
Four	21	60.00	6	17.00	8	23.00
Five	12	52.00	4	17.00	7	30.00
Six	5	33.00	7	47.00	3	20.00
Seven	1	25.00	2	50.00	1	25.00
Eight	3	100.00				
Nine	3	100.00				
Thirteen	1	100.00				
Fourteen	1	100.00				

A chi-square of 22.12 with 12 degrees of freedom resulted from this analysis. This value meets the test of significance at the .05 level of confidence. Hence, we can be confident that Groups D, P and G do not follow identical patterns as to number of siblings. While the differences are not notably apparent, it is worthy of attention that the average number of siblings in each group was: group D, 3.6; group P, 3.1; and group G, 2.96. Hence, we can state with some confidence the dropouts, as a group, were associated with larger families than the graduates, as a group.

Rank in Family

The groups were also compared in terms of the student's rank in family (Table XX). These ranged from first through twelfth. However, for purposes of treatment in a chi-square procedure, ranks of 6 and higher were combined and treated as a single group.

Again, a chi-square procedure was used to test the hypothesis that groups D, P and G followed essentially the same patterns of dispersion according to rank in family. This procedure yielded a chi-square of 42.79, with 12 degrees of freedom. This value met the test of significance at the .01 level of confidence. Hence, we may confidently say that there are patterns of differences among the three groups.

While internal comparisons have to be used cautiously in chi-square, two areas are worthy of note: (1) only six

members of group D were firstborn, compared with an expected or pure chance number of 22; and (2) 34 members of group G were firstborn, compared with a pure chance number of 21.

TABLE XX

Rank in Family

Rank in Family	Dropouts*		Persisters		Graduates**	
	Number	Percent	Number	Percent	Number	Percent
Only Child	13	45.00	10	34.00	6	21.00
1st Born	6	10.00	20	33.00	34	57.00
2nd Born	31	60.00	20	20.00	20	20.00
3rd Born	12	46.00	5	19.00	9	35.00
4th Born	9	60.00	3	20.00	3	20.00
5th Born	3	50.00			3	50.00
6th Born	3	50.00			3	50.00
7th Born	2	100.00				
8th Born	2	100.00				
9th Born	1	100.00				
12th Born	1	100.00				

* 9 subjects did not reply
** 1 subject did not reply

In general, on the basis of these analyses, one can reach the fairly broad conclusion that there are differences,

however diffuse, among groups D, P, and G in terms of sibling status. The graduates as a group were associate more than the dropouts with smaller families and with a rank of firstborn.

Curriculum Change

When asked, "Did you change your curriculum while at Tech?", 64 dropouts answered in the affirmative, against 19 persisters and 28 graduates (Table XXI). When probed for reasons for the change, a wide variety of responses were given, which were categorized into ten closely related areas for convenience in reporting. (Tables XXI-A, B and C).

TABLE XXI

Did You Change Your Curriculum While at Tech?

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	64	52.46	18	31.03	28	35.44
No	58	47.54	40	68.97	51	64.56

An analysis of the data in Table XXI-A revealed that many of the reasons given reflected inadequate career counseling and lack of or loss of motivation. By combining the reasons listed into areas of similarity, we find that

approximately 55 percent of the dropout problems were the results of a lack of awareness of the requirements of the curriculum or of the career for which they were preparing.

TABLE XXI-A

Summary of Dropouts Who Changed Curriculum

Reasons	Dropouts	
	Number	Percent
Could Not Meet Requirements	5	7.81
Did Not Want to Teach	14	21.87
Wanted to Teach	5	7.81
Sarcasm of Advisor	5	7.81
Friends' Influence	2	3.13
Broaden Educational Scope	5	7.81
Would Not be Good at Profession	2	3.13
More Job Opportunities	9	14.06
Lack of Interest	15	23.44
Advisor's Advice	2	3.13

Table XXI-B revealed supporting evidence among the persisters, 58 percent of whom decided that they were involved in a discipline that did not fulfill their expectations for a satisfactory career.

TABLE XXI-B

Summary of Persisters Who Changed Curriculum

Reasons	Persisters	
	Number	Percent
Desired 2-Year Certificate	2	10.53
Decided Not to Teach	9	47.36
More Job Opportunities	5	26.32
Deceased While Full-Time Student	1	5.26
Could Not Meet Requirements of First Choice	2	10.53

The vocational graduates provided additional evidence of misinformation concerning career choices. Approximately 80 percent of the graduates who transferred into vocational programs reported dissatisfaction with their first career choice (Table XXI-C).

TABLE XXI-C

Summary of Graduates Who Changed Curriculum

Reason	Graduates	
	Number	Percent
Lack of Interest	3	10.71
Department Newly Created	2	7.14
More Job Opportunities	22	78.58
Could Not Meet Requirements of First Choice	1	3.57

Many of the remaining cases in groups D, P and G gave "a lack of interest" as a reason for curriculum change. It could be argued that this loss of motivation in many instances could be attributed to dissatisfaction with the first career choice. Evidence presented in these tables provides strong support for improved career guidance and counseling services at all educational levels.

Resignations

In response to the question, "Did you resign from Louisiana Tech while enrolled in a Vocational Education program?", 146 respondents answered "Yes" (Table XXII). Forty of these were persisters who continued their education in another curriculum or at another institution (Table XXII-A).

TABLE XXII

Subjects Who Resigned While in Vocational Education

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	106	86.89	40	68.97	0	00.00
No	16	13.11	18	31.03	79	100.00

The variety of responses seemed to have little central tendency other than general dissatisfaction with college life and conditions over which they had little or no control (Tables XXII-A, A_1, A_2).

TABLE XXII-A

Persisters Who Resigned While in Vocational Education

Reasons	Persisters	
	Number	Percent
Friends Attending Another University	7	17.50
Married and Moved with Spouse to Job	6	15.00
Moved with Family to Another Community	6	15.00
Were Not Happy at Louisiana Tech	3	7.50
Illness	3	7.50
Larger School with Broader Curriculum	2	5.00
Out-of-State Fees Too High	2	5.00
Commuting Too Far Each Day	2	5.00
Job Requirements Too Severe	1	2.50
Wanted to Attend a Smaller School	1	2.50
Wanted to Attend School Away from Home	1	2.50
Change of Interest	1	2.50
Suspension	1	2.50
Could Not Transfer Enough Credits	1	2.50
Tired of School	1	2.50
Program was Canceled	1	2.50
Deceased	1	2.50

TABLE XXII-A_1

Dropouts Who Resigned While in Vocational Education

Reasons	Dropouts	
	Number	Percent
To Be Married	28	26.42
Join Military Service	11	10.37
Tired of Studying and School	10	9.43
Financial	9	8.49
Moved with Family	7	6.60
Job Offer	6	5.66
Pregnancy	6	5.66
(Not Doing Well) Disappointed	5	4.72
Completed 2-Year Secretarial	4	3.77
Not Suited for College	3	2.83
Prolonged Illness	3	2.83
Didn't Like College	3	2.83
Boyfriend in Another College	3	2.83
Father Disabled--Had to Work	2	1.89
Commuting Too Far	2	1.89
Suspended	2	1.89
Refused Reason	2	1.89

TABLE XXII-A_2

Summary of Dropouts Who Resigned
After Changing Curriculum

Reasons	Dropouts Number	Percent
Didn't Want to Teach--Completed Secretarial Course	5	31.25
To Be Married	3	18.75
Wanted to be Self Supporting	2	12.50
Poor Study Habits	2	12.50
Car Accident--Long Convalescence	2	12.50
Handicap Caused Excessive Tension	1	6.25
Pregnancy	1	6.25

Table XXII-A_3 briefly summarizes the graduates' achievements beyond minimum degree requirements.

TABLE XXII-A_3

Summary of Graduates' Achievements, By Sex

Achievements	Graduates Male Number	Percent	Graduates Female Number	Percent
Additional Course Work--Post-Baccalaureate	2	2.53	2	2.53
Admitted to Graduate School	5	6.33	13	16.46
Master's Degree Earned	0	0.00	4	4.18
Cum Laude	1	1.27	5	6.33
Magna Cum Laude	1	1.27	2	2.53
Summa Cum Laude	1	1.27	3	3.79
Deceased	1	1.27	0	0.00

Sixteen dropouts resigned from Tech after changing curriculums and reported a variety of reasons that seemed to have little relationship with the quality of the programs in which they were enrolled.

The overall impression of these data is one of a lack of motivation and dissatisfaction with career choices.

Reflections on Resignations

When queried regarding their satisfaction with the decision to terminate their education, 63 percent of those who did not ask for transcripts indicated that their decision was sound (Table XXIII).

TABLE XXIII

Summary of Dropouts
Reflections on Resignations

Summary of Responses	Yes		No	
	Number	Percent	Number	Percent
Financial	23	18.85		
Job Opportunities	14	11.49		
Lack of Motivation	12	9.84		
Lack of Guidance	12	9.84		
Married	11	9.02		
Vague Career Objectives	5	4.09		
Plans to Complete Degree Requirements:				
Necessary for Career Advancement			35	28.69
For Self Satisfaction			10	8.18

Thirty-seven percent reported dissatisfaction with their decision to terminate and indicated that they would return to complete degree requirements when circumstances permitted. Table XXIII shows the results of these analyses.

Comparison of Subject's Awareness of and Approval of Career Education Concepts

It was not surprising to discover that a majority of vocationally oriented students were aware of the basic concepts of career education. As might be expected, the graduates and those who stayed in school longest were better informed in regards to career education than those who dropped out early in the period selected for study. (Table XXIV).

TABLE XXIV

Comparison of the Subject's Awareness of the Trend Toward Career Education

Responses	Dropouts		Graduates	
	Number	Percent	Number	Percent
Yes	86	47.78	55	69.62
No	92	51.11	23	29.11
No Opinion	2*	1.11	1**	1.27

* 1 Deceased
** Deceased

Subjects who reported no knowledge of the program were asked to read the short statement accompanying Table XXIV-A.

Following a brief discussion of the concept, they were asked to give their opinion as to its value in a secondary school program. Here again, it was no surprise that persons with a vocational background gave overwhelming endorsement for career orientation activities at all levels of the educational system.

The graduates reported a slightly more positive attitude toward the concepts of career education.

TABLE XXIV-A

Career Education Would be Beneficial to Students

(*Read to Subject before Question Was Asked)

Responses	Dropouts		Graduates	
	Number	Percent	Number	Percent
Yes	160	88.89	78	98.73
No	7	3.89	0	0.00
No Opinion	4**	2.22	1***	1.27
Probably	9	5.00	0	0.00

*The Fundamental concept of career education is that all education experiences, curriculum, instruction, and counseling should be geared to preparation for economic independence and an appreciation for the dignity of work.

Beginning in early childhood and in all grades as he moves through school, the child increases his familiarity with the world of work and acquires knowledge necessary to obtain meaningful employment upon leaving school.

** Deceased while still full-time student - 1
*** Deceased soon after graduation

Effectiveness of College Recruiting

With the proliferation of four-year institutions of higher education in the state, recruiting activities have assumed positions of increasing importance in college administration.

Of the 258 subjects of this research 50 percent reported that they had attended one or more recruiting meetings, either on their high school campus or by invitation, on the college campus (Table XXV).

TABLE XXV

Did You Attend a College Recruiting Program on Campus or in Your High School?

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	63	66.32	30	52.63	40	50.63
No	32	33.68	27	47.37	39	49.37

Twenty-three percent of the dropouts indicated that recruiting activities had affected their choice of college as compared to 12 percent of the successful graduates. The persisters occupied a middle position but were more closely aligned with the dropouts. This would seem to indicate a lack of positive commitment to a career choice among group D and P respondents. (See Table XXV-A.)

TABLE XXV-A

Did This Affect Your Choice of College?

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	22	23.66	6	20.00	5	12.50
No	70	75.27	24	80.00	30	75.00
Possibly	1	1.07	0	0.00	5	12.50

This trend is also evident in those who reported that recruiting activities affected their choice of curriculum. (See Table XXV-B). However, the degree of difference is not as evident as in Table XXV-A.

TABLE XXV-B

Did This Affect Your Choice of Curriculum?

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	15	16.13	2	6.67	4	10.81
No	76	81.72	28	93.33	31	84.78
Possibly	2	2.15	0	0.00	2	5.41

This, and other evidence reported in Table I, indicates that early commitment to a college and career choice is a reliable predictor of success in college.

When questioned regarding the effectiveness of college recruiting, all groups reported favorably in support of recruiting activities with groups P and G expressing slightly more confidence (Table XXV-C).

TABLE XXV-C

Do You Feel That College Recruiting Activities are Effective?

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	63	51.64	38	65.52	50	63.29
No	19	15.57	12	20.69	19	24.05
Possibly	6	4.92	0	0.00	0	0.00
No Answer	34	27.87	8	13.79	10	12.66

The respondents favored visiting the college campus rather than college personnel coming to their schools, as shown in Table XXV-D. These observations appear valid and should be of interest to those assisting youth with problems associated with higher education and career orientation.

A number of students remarked that they would have liked to visit more than one department while on the campus.

TABLE XXV-D

Why You Feel College Recruiting Activities Are Effective

Reasons	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Familiarizing Potential Student With College Environment	48	47.53	19	50.00	16	32.00
Broader Knowledge of Curricular Choices	13	12.87	1	2.63	13	26.00
Aids in Decision Making	26	25.74	13	34.21	9	18.00
Liaison Between Counselor and Parents	0	0.00	0	0.00	4	8.00
Impresses Potential Students	4	3.96	0	0.00	3	6.00
Stimulates Interest in College	2	1.98	1	2.63	2	4.00
No Response	8	7.92	4	10.53	3	6.00

Twenty-nine of the 51 graduates who did not attend a recruiting activity reported that they felt it would have been helpful to them.

Vocational Counseling

There have been numerous indications throughout this study of a lack of and a need for counseling at the collegiate level. A significant number of students matriculate at Louisiana Tech with only vague ideas of their educational and career objectives. Fourteen percent of the dropouts and 20 percent of the graduates listed as their objective "to get a degree" or some nebulous aspiration too vague to classify (Table XXVI).

TABLE XXVI

Career Objective at Time of College Entry

Objectives	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Teaching	77	62.60	48	84.21	57	73.08
Home Economist	3	2.44	0	0.00	1	1.28
Marketing	2	1.63	0	0.00	3	3.85
Secretary	22	17.89	2	3.51	1	1.28
Obtain Degree	6	4.88	2	3.51	4	5.13
Social Benefits	2	1.63	0	0.00	1	1.28
Vague	11	8.94	5	8.77	11	14.10

These students are in obvious need of counseling services. Thirty-one percent of the dropouts and 24 percent of the persisters sought counseling at Louisiana Tech (Table XXVII).

TABLE XXVII

Did You Seek Counseling in College?

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	56	31.00	14	24.56	24	30.38
No	67	69.00	43	75.44	51	64.56
No Answer	0	0.00	0	0.00	4	5.06

Of this number, 86 percent of the dropouts and 50 percent of the persisters reported that they had benefited from the counseling process (Table XXVII-A).

TABLE XXVII-A

Do You Feel That Counseling Was Helpful?

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	48	86.00	7	50.00	18	75.00
No	6	10.00	4	28.57	5	20.83
No Answer	2	4.00	3	21.43	1	4.17

Indications are that, even though counseling at the college level is desirable and necessary, this service should begin earlier in the educational system. Students should enter college with clearly defined areas of interest and definite career objectives for the greatest chance to succeed. They recognize the dangers of uncertainty in career choices and reflect this feeling in Table XXVII-B.

TABLE XXVII-B

Recommended Education Level for Counseling

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Elementary	3	3.00	2	4.35	1	1.56
Junior High	21	21.00	5	10.87	4	6.25
High School	65	63.00	31	67.39	51	79.69
College	7	7.00	2	4.35	8	12.50
All Levels	6	6.00	6	13.04	0	0.00

An overwhelming majority of all groups recommended counseling prior to college entry. High school is clearly indicated as the time students want and need counseling services the most. The response was uniform among all groups.

Aptitude Testing

Aptitude testing in high school was not considered of major importance by any of the groups reporting.

As might be expected, groups D and P reported more favorable attitudes than group G (Table XXVIII).

TABLE XXVIII

Attitude Toward Aptitude Testing in High School

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Unfavorable	59	47.97	37	64.91	52	65.82
Favorable	59	47.97	20	35.09	25	31.65
No Answer	5	4.06	0	0.00	2	2.53

An examination of the comments accompanying these reports indicates that the test would be of more value if properly evaluated with the student. Of those reporting, 6.33 percent remarked that they were not informed of the test results.

Aptitude tests, properly evaluated with the student by qualified persons, should be of considerable importance in counseling activities.

Study Habits

When questioned concerning the usefulness of a program in college for developing study habits, none of the groups were particularly receptive. However, 30.28 percent of the dropouts did report that such a program might be useful as

compared to 38.6 percent of the persisters and 50 percent of the graduates (Table XXIX).

TABLE XXIX

Opinions Concerning Usefulness of a Program For Developing Study Habits

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	90	50.28	22	38.60	39	50.00
No	32	49.72	35	61.40	39	50.00

Many respondents felt that studying was a personal "thing" and that each student should develop and adopt a system that worked for him.

Knowledge of Job and Curriculum Requirements

Of considerable surprise in this study was the fact that approximately one-fourth of the subjects had little or no knowledge of the job requirements for their chosen field.

The graduates reported significantly less informed than the dropouts and persisters; 43.59, 19.35 and 21.05 percent, respectively (Table XXX).

TABLE XXX

Were You Aware of the Job Requirements of Your Chosen Profession?

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	88	72.13	45	78.95	44	56.41
No	28	22.95	12	21.05	21	26.92
Vaguely	6	4.92	0	0.00	13	16.67

This seems to support the thesis reported earlier in the study (Table II) that students from college oriented families tend to excel in completing their education successfully, when compared to other groups.

Equally surprising were the number of respondents in each group who were not aware of the requirements of their curriculums when they enrolled in college (Table XXXI).

TABLE XXXI

Were You Aware of the Requirements of Your Chosen Curriculum?

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	97	79.51	48	84.21	67	85.90
No	23	18.85	9	15.79	9	11.54
Vaguely	2	1.64	0	0.00	2	2.56

In this category the graduates report more favorably than the dropouts and persisters but even here, approximately 14 percent of the graduates admit having little or no knowledge of the requirements of their curriculum.

There appear to be strong implications here for intensive guidance and counseling services in the secondary schools. However, it must be remembered that group G, generally had entered college earlier than the dropouts, many of whom had earned only a few hours late in the period under examination. A considerable number of the graduates remarked that when they completed high school there was not as much emphasis on guidance and "career days" as developed in later years. This appears valid, in that persons who graduated during the first year under study could have been four or more years older than the freshmen who dropped out the first semester of the same year. (See college averages, page 21.)

Marital Status of Subjects

As was expected, marital problems exerted strong influence on students' success or lack of success in college. Sixty-seven percent of the combined total of groups D and P reported that marriage, pregnancy, birth of children, or divorce contributed in a significant manner to their decision to withdraw (Table XXXII).

TABLE XXXII

Do You Feel That Marriage Influenced Your Decision to Withdraw from Tech and/or Vocational Education?

	Marriage		Divorce		Children	
	Number	Percent	Number	Percent	Number	Percent
Dropouts	51	41.80				
Dropouts			1	.82		
Dropouts					20	16.39
Persisters	10	8.20				

Even though group G were statistically more involved in marriage and its subsequent problems than group D, they managed to arrive at satisfactory solutions and continue in school (Table XXXII-A).

TABLE XXXII-A

Marital Status of Subjects

	Dropouts		Persisters		Graduates	
Married:	Number	Percent	Number	Percent	Number	Percent
Before College	16	13.11	5	8.77	8	10.13
While Attending	29	23.77	5	8.77	21	26.58
After Leaving	45	36.89	13	22.81	31	39.24
Divorced While Attending	0	0.00	0	0.00	1	1.27
Widowed	0	0.00	1	1.75	0	0.00

Although a large majority of the children involved were born after the parents resigned from school, many pregnancies occurred during their time of enrollment, necessitating the prospective parents' withdrawal (Table XXXIII).

TABLE XXXIII

Parental Status of Subjects

Children	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Before College	3	2.46	0	0.00	4	5.06
While Attending	7	5.74	1	1.75	3	3.80
After Leaving	42	34.43	3	5.26	12	15.19

It has been determined in this study that attrition is heaviest among members of large families. It might be assumed that the parents of the dropouts were not able to provide the additional finances required to care for a family and to remain in school.

Grade Point Average and Ability

In response to the question, "Did your grade point average reflect your college ability?" a considerable number of all groups answered "No". (Table XXXIV).

TABLE XXXIV

Does Your Grade Point Average Reflect Your College Ability?

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	29	23.77	27	46.55	28	35.44
No	89	72.95	29	50.00	49	62.03
No Answer	4	3.28	2	3.45	2	2.53

Of those replying in the affirmative, the dropouts were more reluctant than the persisters and graduates to admit that they had performed as well as they could have.

This did not come as a surprise, since few people care to admit that they did their best and failed as a consequence.

The reasons for failure, given in the order of their frequency, were:

Lack of interest

Did not study

Did not try

Tired of school

Discrepancies in grading procedure

Became nervous taking examinations

Not college material

A casual examination of the four most frequently mentioned reasons for failure leaves the impression that all the items could be attributed to a lack of motivation on the part of the student.

There was a feeling among the research team throughout the study that there was an attitude of almost complete indifference evident among those who failed to complete their college programs. Some seemed to verge on a feeling of hostility toward higher education in general. Similar, though less pronounced, attitudes were evident among members of groups G and P, even though their college careers had apparently been successful and free from major problems.

The researchers reported apparent tendencies among the dropouts to "downgrade" themselves and their abilities and accept their present status in life as normal for themselves.

SECTION III

CAREER ALTERNATIVES

Data accumulated in this study indicate that up to 40 percent of college vocational education students do not accomplish their initial objective; that of obtaining a degree in vocational teacher education. Other data confirm that these dropouts are at a considerable disadvantage when they enter the job market with few skills to offer. Evidence has been presented that suggests that potential dropouts can be identified through definitive counseling activities conducted by trained personnel through all levels of the educational process, particularly secondary school and the freshman year in college.

Dropouts are handicapped persons. Their primary need is to acquire the necessary competencies, through specially designed courses, to succeed in the world of work. They recognized the problem and suggested a partial solution. Approximately one-third of the dropouts reported that they were, or would have been, interested in vocational-technical careers of less than college grade had they been readily available (Table XXXV).

TABLE XXXV

Would You Have Considered Vocational Training of Less Than College Level:

Before Entering Tech?	Dropouts Number	Dropouts Percent	Persisters Number	Persisters Percent	Graduates Number	Graduates Percent
Yes	34	27.87	13	22.81	6	7.69
No	88	72.13	37	64.91	72	92.31
No Answer	0	0.00	7	12.28	0	0.00

After Leaving Tech?	Dropouts Number	Dropouts Percent	Persisters Number	Persisters Percent	Graduates Number	Graduates Percent
Yes	34	27.87	4	7.02	9	11.54
No	88	72.13	45	78.95	69	88.46
No Answer	0	0.00	8	14.03	0	0.00

Now?	Dropouts Number	Dropouts Percent	Persisters Number	Persisters Percent	Graduates Number	Graduates Percent
Yes	31	25.41	3	5.26	14	17.95
No	91	74.59	54	94.74	64	82.05

The dropouts reported low salaries (Table XXXVI), limited opportunities for advancement, instability of employment and general dissatisfaction with the type of work engaged in, as major sources of irritation. Fifty-three percent of the dropouts and 32 percent of the persisters agreed that vocational-technical training of less than a degree program would have been a financial asset to them in their present jobs.

TABLE XXXVI

Wage Scale of Subjects

Scale	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Under $5,000	37	31.62	0	0.00	0	0.00
$5,000 to $5,999	16	13.68	5	33.33	16	26.67
$6,000 to $6,999	15	12.82	4	26.67	17	28.33
$7,000 to $7,999	14	11.97	2	13.33	20	33.33
$8,000 to $9,999	26	22.22	0	0.00	6	10.00
$10,000 to $15,000	9	7.69	4	26.67	1	1.67

Programs listed as areas of major interest, arranged according to popularity were:

Secretarial

Data Processing

Agricultural Technology

Welding

Auto body repair

Construction Technology

Personnel Management

Electricity

Nursing

Cosmetology

Accounting

Vocational-Technical Programs on College Campuses

Considerable interest has been shown by college administrators in recent years regarding the desirability of developing vocational-technical programs of less than baccalaureate degree level on college campuses. Legislative bodies, faced with rising costs and waiting lists at the area vocational-technical schools, are also considering this possibility.

The subjects of this research were asked to express their opinion as to the desirability of associate degree programs on the college campus (Table XXXVII).

TABLE XXXVII

Summary of Opinion of Vocational-Technical Training on College Campus

Responses	Dropouts		Persisters		Graduates	
	Number	Percent	Number	Percent	Number	Percent
Yes	80	65.57	30	51.73	60	75.95
No	23	18.85	19	32.76	16	20.25
No Answer	6	4.92	1	1.72	2	2.53
Not Sure	13	10.66	8	13.79	1	1.27

The responses were overwhelmingly in favor of such a plan. They listed as advantages such things as better facilities, more competent teacher, "more prestige" and the opportunity to be with friends.

These data present a strong endorsement for vocational-technical programs from a group who have had recent post-secondary educational experiences.

SECTION IV

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

This research concerned itself primarily with seven specific objectives:

(1) To locate former Louisiana Tech University students who failed to complete their college program in vocational education.

(2) To interview the dropouts in order to secure their opinions as to what actions the university might have taken to prevent their failure.

(3) To determine their present occupational status and level of educational achievement.

(4) To accumulate and evaluate personal background information that might influence success or failure in college.

(5) To evaluate the importance of vocational guidance functions in career orientation.

(6) To secure the subjects' opinion on several aspects of vocational and career education of less than college grade.

(7) To develop criteria by which potential dropouts might be identified by a "dropout profile" as determined from data collected.

The subjects of this research were full-time students who interrupted their program in Vocational Agriculture, Home Economics, and Business Education at Louisiana Tech University during the academic years 1966-67, 1967-68, 1968-69, 1969-70 and 1970-71.

One hundred and eighty, the total number of dropouts from the three curricula involved, were included in the study.

As a basis for comparison, 79 persons who graduated successfully during the same five-year period were randomly selected to participate in the sampling. One hundred percent of those meeting the specifications above were contacted. Forty-one of the dropouts represent Agriculture, 35 Home Economics, and 104 Business Education. Of the 79 who successfully completed their programs, 15 represented Agriculture, 36 Home Economics, and 28 Business Education.

The basic procedure used in the interpretation of data is that of comparison. The groups being compared are: (1) the group that continued in vocational programs until graduation and (2) the group that dropped out of the vocational programs. The latter group consisted of two sub-groups: those that transferred to another degree program or to another institution (the persisters), and those who did not. In the interpretation process, the persisters have been given considerable attention as a group of major

interest. However, this group has not been compared to the dropout group in most cases, as one is a sub-group of the other. Hence, the basic pattern has been to compare the graduates with (a) the total dropout group and (b) the sub-group of dropouts called the persisters. In some cases each group will be shown as a simple percentage of the total.

In areas where a more careful analysis than simple percentage differences was desirable, the "t" test and chi-square were the principal techniques used. In the area of relationships, there were some situations in this analysis that were suited to some specialized procedures. The one that was of primary value was the coefficient of contingency. This is a relatively crude measure, frequently associated with the chi-square procedure. In several situations, both chi-square and coefficient of contingency (C) are shown.

Since the terms "Graduates", "Dropouts" and "Persisters" were used continuously in this study, the groups were identified with the initials G, D and P.

Locating the Subjects

It was discovered that the subjects were a highly mobile group, widely dispersed, with numerous changes of address and difficult to locate. It was necessary to contact many of the subjects while at their parents' home on brief military leave or an infrequent family visit. It was necessary in numerous instances to employ some person

in the subject's hometown to make the interview contact during one of these infrequent and often unexpected visits.

Of the 259 persons included in the sampling, 47 dropouts and 23 graduates were employed out-of-state. However, 100 percent of the living subjects were contacted.

Interviewing the Subjects

The data in this research were collected through personal interviews with each subject by professional or trained surveyors. The interview was made in the subject's home, place of business or other convenient place designated by the interviewee. Former teachers of the respondent, guidance counselors, members of the research staff and other professional people were used whenever possible. In cases where subjects were located in distant states, long distance telephone calls were made, or if subjects were overseas, parents were asked to secure the information.

Personal data were secured from the subjects' high school records and college transcripts. Other pertinent data were obtained by interview and recorded on a comprehensive questionnaire designed for this study.

Subjects' Present Occupational and Educational Status

Of the 180 persons considered dropouts at the beginning of the study, fifty-seven were reclassified as "persisters", in that they continued their education at another institution

or in another curriculum at Louisiana Tech. One was reported deceased. Forty of this number resigned from Louisiana Tech and continued their education as full-time students at other institutions. A variety of reasons were given for the change, most of which were for convenience' sake and had little bearing on the quality of offerings at Louisiana Tech. More than one-half of these indicated a lack of information concerning the requirements of their curriculum or of their career choice as reasons for the change.

The 122 who resigned from Louisiana Tech and did not continue in school elsewhere gave a number of reasons that had little to do with academic considerations at Tech. Marriage, pregnancy, financial and military obligations accounted for 51 percent of these casualities. Fifteen percent gave reasons amounting to lack of motivation and disinterest. Sixty-three percent of the dropouts indicated at the time of the interview that their decision to resign from college was sound, indicating that they had no alternative. Thirty-seven percent reported dissatisfaction with their decision to terminate and indicated that they would return to complete degree requirements when circumstances permitted.

The dropouts reported low salaries, limited opportunities for advancement, instability of employment and

general dissatisfaction with the type of work engaged in as major sources of irritation.

Twenty percent of the dropouts reported earning less than $5,000 per year with none of the graduates reporting in this category. Eight percent of the dropouts reported a salary of $7,000 - $7,999 as compared to 33 percent of the graduates. Five percent of the dropouts reported earnings of $10,000 to $15,000 with only one graduate reporting a similar income.

Personal Data Influencing Success or Failure in College

High school records and college transcripts were obtained for each subject of this research. Additional information of a personal nature was secured during the interview in an attempt to gain insight into those characteristics which might influence success or failure in college.

A summary of the findings between graduates and dropouts and between graduates and persisters is presented in Tables XXXVIII and XXXIX. A study of Table XXXVIII will reveal that there was a significant difference between graduates and dropouts on six characteristics: high school average, college average, size of high school, occupational classification of father, source of financing education and composite ACT score. There was no significant difference

between graduates and dropouts on SCAT scores, club offices held in high school, and rural-urban background.

TABLE XXXVIII

Summary of Findings Between Graduates and Dropouts

Characteristics	Findings
High School Average	"t" test significant at .01 level
College Average	"t" test significant at .01 level
Rural-Urban Background	Chi-square indicated no significant difference between groups
Size of High School	Chi-square indicated a significant difference at .01 level
Occupational Classification of Fathers	Chi-square indicated a significant difference at .01 level
Source of Financing Education	Chi-square significant at .05 level of confidence
Club Offices held in High School	Chi-square indicated no significant difference among groups
Composite Scores on ACT	"t" test not significant
SCAT: Verbal	"t" test not significant
Quantitative	"t" test not significant
Total	"t" test not significant

Findings between graduates and persisters are presented in Table XXXIX. A study of this table will reveal a significant difference between these two groups on only three

factors: high school average, source of financing education, and club offices held in high school. These results show clearly that there are greater differences between graduates and dropouts than between graduates and persisters.

TABLE XXXIX

Summary of Findings Between Graduates and Persisters

Characteristics	Findings
High School Average	"t" test significant at .01 level
College Average	"t" test not significant
Rural-Urban Background	Chi-square indicated no significant difference between groups
Size of High School	Chi-square indicated no significant difference among groups
Occupational Classification of Fathers	Chi-square indicated no significant difference among groups
Source of Financing Education	Chi-square significant at .05 level of confidence
Club Offices held in High School	Chi-square significant at .05 level
Composite Scores on ACT	"t" test not significant

The results also reveal characteristics that seem to be related to success in vocational curricula at Louisiana Tech University. These characteristics are: high school average,

college average, size of high school, occupation of father, and source of financing.

While not entirely conclusive, several other interesting facts were revealed:

The "only child" occupies a perilous position academically. Forty-five percent of this group failed to complete their curriculum.

The oldest child in the family enjoys a high degree of success in college. Only ten percent of this group failed to complete their programs.

An early decision to attend college favors graduation. Fifty percent of the graduates had made the decision prior to Junior High School.

Representatives of large families (6-12 children) exhibit high rates of attrition.

Marriage and its related problems exert strong influence on college success. Sixty-seven percent of the combined total of groups D and P reported these as contributing to their decision to withdraw.

A strong need and desire for career guidance and counseling was noted throughout the study. Although only one-fourth of the dropouts sought counseling services, their responses to the questionnaire indicated a definite need for guidance in career orientation.

A clear majority of groups D, P and G agreed that college recruiting activities were desirable and effective. They were of the opinion that such activities would be more acceptable if conducted on the college campuses.

All groups gave overwhelming endorsement for the concepts of Career Education.

A substantial majority of all groups favored vocational-technical programs of less than baccalaureate level on the college campuses.

Conclusions and Recommendations

A substantial number of students had made the decision to attend college prior to high school entry.

> Local school systems should investigate the possibilities of developing programs of career education in grades K through 12.

More than one-half of the dropouts, 58 percent of the persisters and 80 percent of the graduates who transferred into vocational education curricula, reported dissatisfaction with their first career choice.

> Local school boards should make every effort to increase the scope and effectiveness of guidance and counseling services at all levels of primary and secondary education.

One hundred forty-six subjects reported that they resigned from college while enrolled in vocational education programs, citing reasons indicating loss of motivation and misconceptions concerning the requirements of their curricula and career choices.

> University administrators should explore a variety of methods of expanding and individualizing counseling services for students, especially during the freshman year.

An impressive majority of successful college students list their parents as the motivating force for their decision to attend college.

Parents of potential college students should insist that the local schools provide complete career orientation and counseling services for all students.

High School averages are reliable predictors of success in college.

Parents, high school principals, counselors, and college advisors should assist these students in making realistic curricula and career choices.

ACT scores are not reliable predictors of success in college for gifted students.

Parents and school personnel at all educational levels should make special efforts to motivate, challenge and assist superior students in planning careers beyond high school.

Marriage and its subsequent responsibilities contribute significantly to the rate of attrition.

Students should consider delaying marriage until graduation unless satisfactory financial and living adjustments can be arranged.

A substantial number of students endorse the establishment of vocational-technical programs of less than baccalaureate degree level on college campuses.

Governing boards and university administrators should investigate the feasibility of developing associate degree programs within the framework of higher education systems.

The data accumulated in this study revealed that many students enter college because it is "expected of them". They lack positive motivation and have no clear objectives to orient their post-secondary occupational preparation.

> Guidance personnel in secondary schools should make special efforts to identify these students and assist them in developing career choices that are best suited to their interests, needs and abilities.

College students are subjected to much of the stress and frustrations of adults who are occupied with problems of excelling in their respective businesses or professions. Success in the world of work is a nebulous, elusive goal, demanding much in the way of initiative, innovation, imagination and sincere effort. The rewards are commensurate with the applications of these qualities by aggressive achievers. Success and achievement with their subsequent satisfaction are challenges for greater effort and become justification for higher achievement. This is not always true of the college student's experiences.

Public institutions of higher education must by necessity conduct programs characterized by a certain degree of homogeneity. It follows that these programs often do not challenge the superior student to his best effort or reward him with a high sense of accomplishment and satisfaction.

While not challenging the superior student to achieve to his capacity, programs may be beyond the grasp of the marginal student. The pace, geared to the homogeneous middle group, is often too fast for complete assimilation by the less gifted student. The results are disappointment, frustration, failure and eventual withdrawal from school with its attendant trauma.

Data compiled in this study lend credence to this assumption. The successful graduates had the lowest mean ACT Score of the three groups, but were a much more homogeneous body, with a standard deviation of only 4.

Students are complex creatures. Variables are numerous and often defy classification. An attempt to develop a student dropout profile is a statistical assessment of a group of individuals at one particular point in time. Outside influences exert varying pressures at different times under different conditions. Reactions to outer forces at one moment in time are not constant over an extended period. Hence, any firm statement describing the characteristics of a dropout would be subject to challenge.

Profile of a Dropout

Based upon the relatively small population sample represented in this study, it would appear that students whose educational achievements deviate significantly from the population norm are poor academic risks.

Students from large families with marginal financial resources are less likely to succeed in a college program than those from smaller families with adequate resources.

Individuals with vague or unrealistic career objectives are likely victims of attrition.

An "only child" has a high propensity for failure in a college program.

Marriage and its subsequent problems reduce a student's probability for success in college.

The absence of positive motivation for achievement contributes to failure in academic programs.

Graduates of smaller high schools are greater academic risks statistically than those from larger high schools.

Assuming these observations to be valid, a student exhibiting one or more of the above characteristics could be identified as dropout prone and possibly in need of individual guidance and counseling services.

APPENDIX 1

DATA FROM HIGH SCHOOL AND COLLEGE RECORDS

Subject's Name _____ Sex _____

Home Address _____ Date of Birth _____

_____

_____

Parent or Guardian _____

Parent's Occupation _____

Parent's Address _____

_____

Telephone No. _____

High School From Which Graduated _____

Date _____

Size of High School _____

Population of Municipality _____

ACT Score _____ SCAT Score _____

Date of First Entrance at Tech _____

Date Graduated _____ Date Withdrew _____

Pursued Average _____ Earned Average _____

Total Hours Pursued _____

Total Hours Earned _____

APPENDIX 2

QUESTIONNAIRE

Name of Subject _____ Sex _____

Name of Respondent _____ Relation _____

Address of Respondent _____

_____

1. Did you participate in any competitive events in high school? _____ (If "yes") How many? _____

2. In how many school organizations were you an active member? _____

3. Were you an officer in any student organization in high school? _____ (If "yes") How many? _____

4. Were you employed during the school year while you were in high school? _____ In college? _____

5. At what stage in life did you decide to attend college?

_____

_____

6. What prompted you to make this decision (try to determine if he was pressured by parents, counselors, friends, etc.) _____

_____

7. Why did you decide to attend Louisiana Tech? _____

_____

_____

8. How was your college education financed? _____

_____

_____

9. Did you attend a college recruiting program on campus or in your high school? _____

A. (If "yes", ask) Did this program affect your choice of college? _____

B. (If "yes", ask) Did this program affect your choice of curriculum? _____

10. Do you feel that college recruiting activities are effective? Yes _____ No _____ Why? _____

_____

11. Do you feel that aptitude testing in high school would have helped direct your career choice? _____

_____

12. Do you feel that vocational counseling would have been helpful during your educational career? _____

A. (If "yes") At what stage(s): a) elementary; b) junior high; c) high school; d) college? _____

13. Did you seek counseling in college? _____

A. (If "yes") Do you feel it was helpful to you? _____

14. What were your career objectives upon entering a vocational training area at Tech? _____

_____

_____

15. Were you aware of the requirements of your chosen curriculum? _____

16. Were you aware of the job requirements of your chosen profession when you entered college? _____

17. Did you change your curriculum while at Tech? _____

A. (If "yes") Reasons for change _____

_____

_____

_____

18. Did you resign from Tech while in Vocational Education? _____

A. (If "yes") Reasons for resignation _____

_____

_____

_____

B. (If "no") Did you resign from Tech after changing your curriculum? (Probe for reasons) _____

_____

_____

_____

19. Do you now think this decision was wise? _____

Why? _____

_____

20. Would you have found a program for developing study habits helpful? _____

21. Have you graduated from a college? _____

A. (If "yes") What college? _____

B. (If graduated) What contributed to your success?

_____

_____

22. Are you currently enrolled in Tech? _____
(If subject has not graduated and has left Tech, ask)
Do you now attend another college?
Yes _____ (If "yes", ask 22 A, only)
No _____ (If "no", ask 22 B, C, D)

A. In Vocational Education? Yes _____ No _____

B. What circumstances made you decide to stop your formal education? _____

_____

_____

C. Would you select the same curriculum upon re-entry?

_____ (If "no") Which curriculum would you select?

_____

Why? _____

_____

D. What is your present employment? _____

_____

23. What type of position do you plan to be holding in ten years, or so? _____

24. Would you have considered vocational training of less than college level before entering Tech? Yes____ No____ After leaving Tech? Yes____ No____ Now? Yes____ No____

25. What type of non-degree vocational program would you have considered if any had been available to you? _____

_____

_____

26. (If subject has not graduated from college, ask) Do you feel that graduation from college or a vocational training program of less than college level would be a financial asset to you? ____ (If "yes") In what way?

_____

_____

27. Do you feel that vocational and technical training of less than a degree program would be more acceptable if offered on a college campus? (Probe) _____

_____

_____

28. Do you feel your grade-point average indicates your college ability? _____

29. Are you aware of the trend toward career education?*

_____

(Read to subject, then ask No. 30)

* The fundamental concept of career education is that all educational experiences, curriculum, instruction, and counseling should be geared to preparation for economic independence and an appreciation for the dignity of work.

Beginning in early childhood and in all grades as he moves through school, the child increases his familiarity with the world of work and acquires knowledge necessary to obtain meaningful employment upon leaving school.

30. Do you feel this type of education would be beneficial to students? _____

_____

31. Number of siblings in family _____. Your rank _____

32. What was the last grade of school your mother finished, including special courses like art or secretarial and so on? _____

33. What was the last grade of school your father finished, including special courses like radio repair or welding and so on? _____

34. Were your parents residing together when you entered Tech? _____ (If "yes", ask 35; if "no", go to 36).

35. Were your parents residing together when you withdrew from Vocational Education?

Yes _____ (Omit 36) No _____ (Ask 36)

36. Did this affect your withdrawal from Tech? _____

_____

37. What was your mother's total annual income when you entered Tech? _____

A. What was your father's total annual income when you entered Tech? _____

38. What was your father's occupation at the time you entered Tech? _____

39. What was your mother's occupation at the time you entered Tech? _____

Circle one

40. Are you single, married, widowed or divorced?

A. If Single, ask 42.

B. Married: a) before entering Tech _____

b) while at Tech _____

c) after leaving Tech _____

Do you feel that marriage influenced your decision to withdraw from Tech and/or from Vocational Education?

_____

C. Divorced: a) before entering Tech _____

b) while at Tech _____

c) after leaving Tech _____

Do you feel that this affected your withdrawal from Tech and/or from Vocational Education? _____

_____

D. Widowed: a) before entering Tech _____

b) while at Tech _____

c) after leaving Tech _____

Do you feel that this affected your withdrawal from Tech and/or from Vocational Education? _____

_____

41. Did you have any children: a) before entering Tech ___

b) while at Tech _____

c) after leaving Tech _____

Do you feel that parenthood affected your withdrawal from Tech and/or Vocational Education? _____

_____

42. What has been your approximate yearly income since leaving Tech? _____

_____ _____

Date Interviewed Signature of Interviewer

FOREWORD

For Interviewer

This questionnaire has been designed to meet the needs of our objectives with the fewest possible questions. Therefore, it is imperative that all of the questions that apply in the case of each interviewee be answered as completely as possible.

Also, certain of these queries are key questions to our objectives. Therefore, close attention should be paid to their answers, and the fullest, most accurate answer should be sought. Please take note of the instructions for those questions but do not overlook the ones not mentioned here; for all of the questions are important and should be answered if they apply to the individual.

INSTRUCTIONS FOR INTERVIEWER

Name of Respondent:	Use this line only if you interviewed parent or guardian.
Question 1:	All events, both sport and academic, should be included, baseball, judging teams, etc.
Question 4:	Try to determine why job was helpful; interest in work, financial needs, etc.
Question 8:	Attempt to obtain specific answer (what type loan, what type grant, full, partial help, etc.).
Question 9-b:	"b" seeks to determine if the recruiting program affected the student's choice of curriculum.
Question 11:	Probe for more than a yes or no answer. Find out if he had any aptitude tests and feelings about these.
Question 15:	This refers to chosen curriculum of Vocational Education. That is, Agricultural Education, Business Education or Home Economics Teacher Education.
Question 16:	This refers to their professional choice when first entered a vocational training program.
Question 17:	Probe for possibility of more than one change. Indicate all. Probe for reason changed, especially where Vocational Education is involved, either to or from.
Question 19:	Refers to decision to withdraw or resign from Vocational Education.
Question 21-b:	Probe for all reasons including college life, possible curriculum change, etc.
Question 25:	Probe for possible interests now.

Question 29 & 30: Read explanation of ~~Car~~er Education only after receiving answer to question number 29. 29 seeks to determine awareness of trend and not the understanding of the trend. (This refers to all occupations and professions; not only Vocational). Read the explanation before asking 30. Be sure it is as clear as possible.